

Red Flag Event Summary – NWS Duluth

2015 April 15th

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Synopsis:

This Red Flag Warning, shown in figure 1, was issued in coordination of Minnesota and Wisconsin Land Managers for warm temperatures, low relative humidity and gusty south winds.

Afternoon temperatures topped out in the 65 to 70 range; which is the normal high for the beginning June. Minimum relative humidity values dropped to the mid-teens to the low 20s across the warned area, combined with frequent wind gusts of 25 to 30 mph.

Weather:

On Wednesday April 15th, Minnesota and the western Lake Superior region was positioned ahead of a cold front in the Dakotas. The resulting pressure gradient produced gusty south winds, with the strongest winds near the cold front, decreasing to the east. Figure 2 is a surface analysis overlaid on an infrared satellite image. The blue colors in the satellite image depict the clear skies associated with the very dry air mass. Figure 3 is the Storm Prediction Center's Fire Weather Outlook for April 15th.

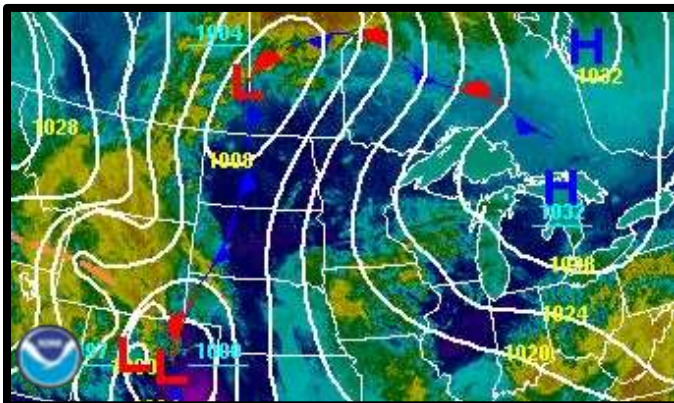


Figure 2. Surface analysis and IR Satellite. 1430 L, 2015 April 15.

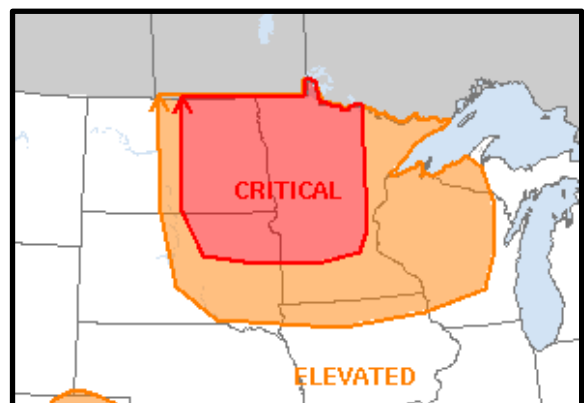


Figure 3. SPC Fire Weather Outlook 2015 April 15

NWS Services:

- Critical Fire Weather conditions were highlighted in the Hazardous Weather Outlook and Fire Weather Planning Forecast.
- A Fire Weather Watch was issued for all MN Zones at 300 pm the afternoon of Tuesday April 14th. Douglas, Bayfield and Burnett counties in WI were added to the watch at 500 pm that evening.
- The watch was upgraded to a Red Flag Warning at 430 am Wednesday morning, April 15th. Sawyer county in Wisconsin was also put into the RFW at this time.

- The Duluth NWS Weather Forecast Office provided a special weather briefing to the Minnesota Department of Natural Resources on the morning of April 15th.
- A Fire Danger Monitoring Webpage was linked in the Top News of the Day Section on the Duluth NWS Home Page.
- The Weather Story Graphic produced that morning highlighted the critical fire weather conditions.

Fire Reports:

Minnesota

- The northeast region of MN reported 10 fires for 20 acres on the 15th.
- The Crescent Fire by the International Falls airport had a majority of those acres and prompted precautionary evacuation of homes by airport.
- Hibbing Area is still mopping up a 200 acre fire from last Friday, April 10th.
- The Central region of MN 12 fires for 35 acres

Wisconsin (Northwest District)

- 46 fires, 140 acres this week.
 - Busiest day was Sunday the 12th, several power line fires in Brule area.
- 47 acre fire in Port Wing burned right up to Lake Superior (date not known)

Red Flag warning Verification:

April 15th, 2015

of Warnings Issued: 18
 # of Warning Verified: 17
 POD: 100%
 FAR: 0.15
 Ave Lead Time: 7.2 hours

2015	Red Flag Watch		Red Flag Warning			Verification						Observations			
Date(s)	Issued	Zones	Time Issued	Zones	Valid Time	Time	Lead Time	Site	RH	Temp	Wind	Max T	Min RH	Max SUS	Max Gust
April 15th	04/14 1516	10	04/15 0436	10	1200-2000	1108	6:32	LITM5	18%	67	17 G28	72	13%	19	35
	04/14 1516	11	04/15 0436	11	1200-2000	1008	5:32	ORBM5	20%	63	13 G25	72	13%	15	29
	04/14 1516	12	04/15 0436	12	1200-2000	1304	8:28	SEAM5	15%	68	13 G26	68	15%	13	27
	04/14 1516	19	04/15 0436	19	1200-2000	1104	6:28	ELOM5	17%	65	14 G26	70	15%	19	32
	04/14 1516	37	04/15 0436	37	1200-2000	1408	9:32	SNWM5	14%	69	10 G29	69	14%	12	29
	04/14 1516	18	04/15 0436	18	1200-2000	1113	6:37	KFOZ	18%	66	19 G28	73	13%	20	28
	04/14 1516	26	04/15 0436	26	1200-2000	1107	6:31	HCYM5	19%	65	14 G27	70	16%	14	27
	04/14 1516	25	04/15 0436	25	1200-2000	1101	6:25	CASM5	23%	65	12 G26	72	14%	15	29
	04/14 1516	33	04/15 0436	33	1200-2000	1401	9:25	KPWC	24%	68	21 G26	70	23%	23	32
	04/14 1516	34	04/15 0436	34	1200-2000	1106	6:30	BIRM5	20%	65	14 G26	69	14%	19	35
	04/14 1516	35	04/15 0436	35	1200-2000	1214	7:38	KHZX	20%	64	16 G26	68	18%	18	28
	04/14 1516	36	04/15 0436	36	1200-2000	1152	7:16	RLKM5	16%	67	15 G26	69	15%	15	26
	04/14 1516	38	04/15 0436	38	1200-2000	1115	6:39	SCXM5	15%	67	13 G27	70	14%	13	27
	04/14 1713	1	04/15 0436	1	1200-2000	1235	7:59	KOLG	19%	66	15 G23	68	17%	15	26
	04/14 1713	2	04/15 0436	2	1200-2000	1202		WSHW3	17%	66	11 G22	70	14%	12	25
	04/14 1713	6	04/15 0436	6	1200-2000	1030	5:54	KRZN	16%	64	16 G22	69	14%	21	28
	04/14 1713	7	04/15 0436	7	1200-2000	1105	6:29	HAUW3	19%	61	17 G26	66	13%	17	26
		8	04/15 0436	8	1200-2000	1253	8:17	KHYR	18%	65	18 G26	67	17%	18	26

Blue colored cells denote weather conditions that did not meet Red Flag Criteria with RFW in effect.
Table does not account for fuel conditions.